

For Research Use Only

# POT1 Polyclonal antibody

Catalog Number: 10581-1-AP **12 Publications**



## Basic Information

**Catalog Number:**

10581-1-AP

**Size:**

600 µg/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG0875

**GenBank Accession Number:**

BC002923

**GeneID (NCBI):**

25913

**UNIPROT ID:**

Q9NUX5

**Full Name:**

POT1 protection of telomeres 1 homolog (S. pombe)

**Calculated MW:**

71 kDa

**Observed MW:**

71 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:500-1:1000

IHC 1:20-1:200

## Applications

**Tested Applications:**

IHC, WB, ELISA

**Cited Applications:**

WB, IP, IHC

**Species Specificity:**

human, mouse

**Cited Species:**

human, mouse

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

WB : HeLa cells, PC-3 cells

IHC : human prostate cancer tissue, human cervical cancer tissue

## Background Information

Protection of telomeres 1(POT1) is a conserved protein that binds the G-rich strand of its own telomeric repeat sequence, with a role in protecting chromosome ends. It's housekeeping gene that is required to ensure the integrity of chromosome ends in all cells. It's a component of the telomerase ribonucleoprotein(RNP) complex that is essential for the replication of chromosome termini. It consists the TRF1 complex that is involved in the regulation of telomere length by cis-inhibition of telomerase. We have discovered that POT1 exists in at least three consistently occurring forms; 90, 70 and 45kDa. The unexpected molecular weights of POT1 seem to be associated with SUMO1 and ubiquitin conjugation; the latter occurring at a double lysine residue at 289-KK-290 (.PMID: 24054699)

## Notable Publications

Author	Pubmed ID	Journal	Application
Umashankar Singh	24054699	DNA Repair (Amst)	WB
Esra Gozde Kosebent	32464172	Exp Gerontol	IHC
Hayley Robinson	35769259	Front Cell Dev Biol	WB

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

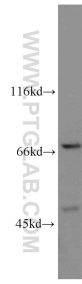
T: 4006900926

E: Proteintech-CN@ptglab.com

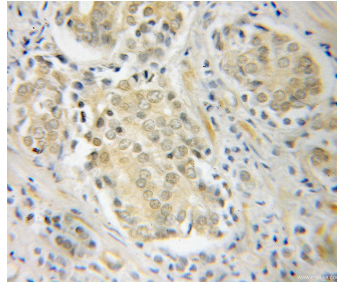
W: ptgcn.com

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## Selected Validation Data



HeLa cells were subjected to SDS PAGE followed by western blot with 10581-1-AP (POT1 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human prostate cancer using 10581-1-AP (POT1 antibody) at dilution of 1:100 (under 25x lens).